

CLAIMS

1. A method of controlling transmissions by a group of wireless transceivers, comprising:
transmitting to each of said group a status reporting command; and
receiving status reports from said group of transceivers at intervals determined according to said status reporting command.
2. A method as claimed in claim 1, wherein the status reports are transmitted in a channel shared amongst said group.
3. A method as claimed in claim 2, wherein the capacity of said channel is shared between said status reports and data transmitted by one or more of said group according to a channel allocation scheme transmitted to said transceivers.
4. A method as claimed in claim 2 or claim 3, wherein the intervals indicated by said status reporting commands are determined according to the demand by the transceivers for capacity in said channel.
5. A method as claimed in any preceding claim, wherein said status reports indicate a quantity of data awaiting transmission by the respective transceivers.
6. A method of transmission by a wireless transceiver, comprising:
receiving a status reporting command; and
transmitting status reports at intervals determined according to said status reporting command.
7. A method as claimed in claim 6, wherein said status reports are transmitted in a channel shared with other transceivers.

8. A method as claimed in claim 7, further comprising receiving a channel allocation signal indicating the allocation of a portion of said channel allocated to said transceiver, and transmitting communications data in said allocated portion of said channel.

9. A method as claimed in ~~any one of claims 6 to 8~~, wherein the status reports indicate a quantity of data awaiting transmission at the transceiver.

10. A method of transmission by a wireless transceiver, comprising:
transmitting a status report indicating an amount of data awaiting transmission by said transceiver and the required transmission time of at least some of said data.

11. A method as claimed in claim 10, wherein said status report relates to transmission in a specified channel.

12. A method as claimed in claim 10 ~~or claim 11~~, wherein said status report includes:
a length field indicating the amount of data awaiting transmission;
a start time field indicating the required transmission time of a first portion of said data awaiting transmission; and
an end time field indicating the required transmission time of a last portion of said data awaiting transmission.

13. A method of transmission in a contention-based access channel by a wireless transceiver, comprising:
a) transmitting a burst in said channel;
b) detecting whether said burst has collided with another burst in said channel;
and, if a collision is detected at said detecting step, waiting for a period determined according to a repeat parameter before repeating steps a) and b), wherein said repeat parameter is received by said transceiver.

14. A method as claimed in claim ¹³~~13~~, wherein said period is randomly or pseudo-randomly selected from a range indicated by said repeat parameter.

15. A method as claimed in claim 13 or claim ~~14~~, wherein said repeat parameter includes a increment by which said range is increased after each repetition of steps a) and b).

16. A method of controlling transmission by a wireless transceiver in a channel shared with transmissions by other transceivers, comprising:

monitoring data transmitted to said transceiver;

predicting, on the basis of said monitoring step, a demand for capacity in said channel by said transceiver, and

transmitting to said transceiver an allocation signal indicating an allocation in said channel determined according to said predicted demand.

17. A method as claimed in claim 16, including generating a statistical model based on previous traffic flow to and from wireless transceivers, wherein the demand for capacity is predicted according to said statistical model.

18. A method as claimed in claim ~~16 or claim 17~~, including detecting the content of said monitored data, wherein the demand for capacity is predicted according to said content.

19. A method of allocating frequency channels to a plurality of wireless transceivers, comprising:

transmitting to each of said transceivers a forward frequency channel allocation signal indicating an allocation of one or more forward frequency channels which that transceiver is to receive; and

transmitting to each of said transceivers, in at least one said forward frequency channels assigned to that transceiver, a respective return channel allocation signal indicating an allocation of one or more return frequency channels in which that transceiver may transmit;

wherein, for each forward frequency channel, a set of preferred return frequency channels is stored, such that for each of said transceivers to which a specified one of said forward frequency channels is allocated, the allocated one or more return frequency

6
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

20. A method of allocating contention-based capacity to a plurality of wireless transceivers, comprising:

transmitting to said transceivers a first contention-based capacity allocation signal indicating a first channel capacity assigned for contention-based access to said transceivers; receiving in said first channel capacity, transmissions from said transceivers; detecting a level of usage by said transmissions of said first channel capacity; determining, according to said level and said first channel capacity, a second channel capacity assigned for contention-based access to said transceivers; and transmitting a second contention-based capacity allocation signal, indicating said second channel capacity, to said transceivers.

21. Apparatus arranged to perform a method as claimed in any preceding claim.

22. A wireless base station arranged to perform a method as claimed in any one of claims 1 to 5, and 16 to 20.

23. A wireless terminal arranged to perform a method as claimed in any one of claims 6 to 15.

24. A method substantially as herein described.

25. Apparatus arranged to perform the method as claimed in claim 24.

Add B_1